NATIONAL CENTER FOR HEALTH STATISTICS DATA LINE

Twin births are on the increase in the United States, and rose in 1988 to the highest level in 4 decades.

Twins made up slightly more than 2 percent of all live births in 1988, yet accounted for almost 16 percent of all low birth weight infants and 10 percent of all those born prematurely, according to the National Center for Health Statistics (NCHS).

NCHS is the Federal Government's principal vital and health statistics agency. NCHS data systems cover the health field from birth to death, including overall health status, lifestyle and exposure to unhealthy influences, the onset and diagnosis of illness and disability, and the use of health care. NCHS is part of the Public Health Service's Centers for Disease Control.

A new NCHS report (1) tracks twin birth trends since 1950 and analyzes twin births in 1988 by such health characteristics as birth weight, period of gestation, and Apgar score. Both the number and ratio of twin births per 1,000 live births have risen steadily since the early 1970s, following a slight decline in twin birth ratios during the decades of the 50s and 60s.

- Twin births totaled 85,315 in 1988, for a ratio of 21.8 per 1,000 live births, the highest ratio since 1950. Data for 1989 show 90,118 twin births and a ratio of 22.3.
- The rise in twin births reflects the increased use of fertility drugs which greatly increases the risk of multiple ovulation and delivery of multiple births. The continued trend in delayed childbearing has had an effect as well, with older mothers more likely to have a multiple birth.
- Black women are more likely to have twin births, although recently the racial gap has narrowed owing to a more rapid increase in twins for white mothers.
- Asian women have the lowest rate of twin deliveries.
- About 45 percent of all twin births are preterm (before 37 weeks gestation), compared to 9.4 percent of single births. Preterm delivery is one of the major causes of infant mortality for twins.
- Twins weigh less at birth than single birth infants, in part because of their shorter gestation. However, twins

weigh less at each gestational period. Low birth weight is twice as likely for twins (75.5 percent) than for single birth infants (34.6 percent) before 37 weeks of gestation. At full term, twins are nearly 11 times as likely (28.3 percent) to be of low birth weight than infants of single births (2.7 percent).

• The health problems of twins are especially acute in the black population owing to blacks' higher rate of twin deliveries and their greater prevalence of low birth weight.

Software for Data Access

A newly available software product makes it possible for users of large NCHS data files to produce their own CD-ROMs, WORMs, and diskettes. Originally designed to facilitate access to NCHS data, the software can be used with any large data set in any field of application, although some special features make it particularly useful for health and epidemiologic analyses.

The Statistical Export and Tabulation System (SETS) Designer Kit (2) provides users with cost-effective and efficient tools to design, develop, analyze, and produce read-only data access systems on CD-ROMs and to place their own data into the system. This powerful software makes microdata. formerly accessible only on mainframe systems, available at the personal computer level. Data systems created with the kit may be installed directly on networks. CD-ROMs are compact disks with read-only memory. WORMs are diskettes with a write once, read many. capability.

SETS, a DOS-formatted product, operates in full screen mode with pop-up menus. More than 40 executable programs are available within a singular designer interface. SETS provides the user with direct access to microdata, self-documenting field and value labels, a complex boolean search engine for data and documentation, ad hoc tabulation using spreadsheet capabilities, data export to data base and statistical software, contest-sensitive help at all levels, and global search capability or documentation from any point in the system.

Data access systems using SETS can have up to 200 files in each system, up to 15 million records, which

can be of either hierarchical or flat-file structures. SETS can accommodate weighted or unweighted records of up to 3,000 characters and up to 1,500 records per file.

The software package has a Quick Tour demonstration, a users manual, and an on-line technical manual for applications development. SETS Designer Kit may be purchased from either the U.S. Government Printing Office or the National Technical Information Service. Ordering information is available from the NCHS Scientific and Technical Information Branch.

Proceedings of Age-Adjustment Workshop

Among newly available NCHS publications is the proceedings of a workshop (3) held in March 1991 to address concerns arising from the use of the 1940 U.S. population as a standard for age adjustment of vital rates and the issues surrounding the use of alternative standards. Participants included representatives of Federal Government agencies, the National Committee on Vital and Health Statistics, the State of Michigan, and present and former NCHS staff. Presentations covered the history of standardization for vital events, advantages and disadvantages of age adjustment, the choice of the standard for age adjustment, use of age-adjusted rates for cancer and other chronic diseases, age adjustment for the Year 2000 health objectives, and age adjustment as applied to the NCHS mortality data.

Concerns expressed in the workshop led to a series of recommendations that have been adopted by NCHS. While the 1940 U.S. population will continue to be used for the ageadjustment of vital rates, research will be initiated on issues related to the introduction of a new or additional standard by the year 2000. These include the feasibility of producing tables of age-adjusted rates for leading causes of death from 1960 to the present for broad age groupings and the utility and timeliness of producing age-adjusted rates based on the latest decennial census.

To improve the usefulness and understanding of current practices, NCHS publications will be revised to include material dealing with the appropriate use and interpretation of age-adjusted rates. While NCHS will continue to produce and publish age-adjusted rates based on the 1940 U.S. population (the "Standard Million"), other agencies need not use that standard and researchers dealing with particular topics should not consider the use of other standard populations inappropriate. However, the suggestion has been made that researchers indicate that the use of other standards is a departure from standard NCHS practice.

Profile of Chronically III Children

Respiratory allergies, ear infections, and asthma are among the most frequent chronic conditions experienced by American children, according to a new NCHS report (4). Based on a special survey of the health of children in 1988, NCHS has identified the most common diseases for those younger than 18 years.

Hay fever and respiratory allergies was the most frequent category of conditions experienced by 5.8 million children, followed by repeated or frequent ear infection, 5.7 million; asthma, 2.7 million; frequent or severe headache, 1.8 million; digestive allergies, 1.6 million; and frequent diarrhea or bowel trouble, 1.3 million.

The report estimates that about 10 million children have special needs, defined as having to limit their usual activities or experiencing serious pain or discomfort owing to the condition. Far less frequent but more likely to cause special needs was cerebral palsy. More than 90 percent of the 112,000 children with cerebral palsy had special needs.

About 13 percent of chronically ill children with special needs had neither private health insurance or Medicaid coverage. An estimated one-quarter of Hispanic and low-income children were without that coverage.

Call for Papers

NCHS has issued a call for papers for the biennial Public Health Conference on Records and Statistics PHCRS), to be held July 19–21, 1993, in Washington, DC. The theme of the conference will be "Toward the Year 2000—Refining the Measures." PHCRS is a forum for recent advances and concepts in public health statis-

tics. The focus will be refinements in health statistics that are needed for better understanding of health status and determinants.

PHCRS will highlight the development of data and statistical support for Healthy People 2000, the major public health initiative on the Federal, State, and local levels that sets more than 300 measurable goals to increase the span of healthy life, reduce health disparities in the population, and achieve access to preventive services for all Americans. A common set of health indicators has been developed for use in measuring health status at all levels. Further work will ensure that comparable methods will be used to allow comparisons across geographic, political, and programmatic lines. PHCRS sessions will deal with data collection and analysis as well as conceptual and methodological issues related to the Year 2000 objectives.

One objective is increasing the span of healthy life. Progress toward this objective is supported by the capability to measure these influences effectively, to continue advances, and to determine the refinements of measurement that are necessary for guiding public health practice. NCHS is soliciting conference papers on efforts related to the span of healthy life, infant mortality, children and youth, mental health indicators, family and health, nutrition, injuries and violence, and the care of the elderly.

Problems in providing the statistical support needed to measure health disparities will be considered. One of the major impediments to measuring real disparities among population groups or geographic areas is the specificity of health data available. Most health differentials are measurable only for very large population subgroups or large areas. A recognized need exists for refined measures with which to delineate the needs of population subgroups. Issues affecting population subgroup measurements will be addressed in sessions on race and ethnicity classification, people with disabilities, health statistics from record systems, numerator-denominator linkage, international comparisons, issues in confidentiality, methodologic issues for national minority data, socioeconomic indicators, intercensal population estimates, and special focus surveys.

Other problems to be considered at the conference are whether effective

preventive services and medical care are reaching the population needing them and how health statistics can better address the management and evaluation of these services. Concurrent sessions will cover cost-benefit analyses, comparable methods and data, medical effectiveness outcomes research, health data for program management, data support of medical care policy, prevention effectiveness, and barriers to care.

Papers on any of these topics will be considered for presentation. Preference will be given to completed research and to abstracts in which the results of research are described. Applications for submitting abstracts are available from NCHS, PHCRS, 6525 Belcrest Rd., Room 1100, Hyattsville, MD 20782; tel. (301) 436-7142. Abstracts must be received by February 5, 1993.

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NCHS publications are available from the NCHS Scientific and Technical Information Branch, Room 1064, Hyattsville, MD 20782; tel. (301) 436-8500. The branch will assist readers in obtaining and using NCHS printed and electronic products.

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